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10/796,153

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EXAMINER

PARK, JOHN J

ART UNIT

PAPER NUMBER

2876

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/796,153

Applicant(s)

FRANTZ ET AL.

Examiner

John J. Park

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>Herewith</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 13, 18, 20, and 21 are rejected under 35 U.S.C. 102(b) as anticipated by Ogasawara (U.S. patent No. 6,512,919, cited by the applicant).

Re claim 13, a system for decoding and analyzing a barcode (See Fig. 1) comprising:
at least one machine readable barcode (See 22 and 31 in Fig. 1);
at least one mobile device equipped with a digital camera for imaging said barcode to create a barcode image (See Col. 3 Line 13-14);
a wireless network (See Fig. 1); and
a server for receiving and processing said barcode image, decoding said barcode image to extract barcode information, processing said barcode information via said wireless network (See Col. 22 Line 40-68), wherein said server transmits media content to said mobile device after processing said barcode information (See Col. 6 Line 42-52).

Re claim 18, a system for decoding and analyzing a barcode according to Claim 14, wherein said mobile device is at least one of the group consisting of a camera phone, mobile phone, smart phone, PDA, pager, pocket PC, desktop, or laptop computer (See Fig. 1; Fig. 10).

Re claim 20, a system for decoding and analyzing a barcode according to Claim 14, wherein said media content is a search result of a database constructed from said barcode information (See Col. 22 Line 40-68).

Re claim 21, a system for decoding and analyzing a barcode according to Claim 14, wherein said media content transmitted to said mobile device is product information about said manufactured good (See Col. 22 Line 45-51).

Therefore, Ogasawara reasonably can be read to describe every limitation of claims 13, 18, 20, and 21.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 7, 9, 10, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogasawara (U.S. patent No. 6,512,919, cited by the applicant) in view of Tsikos et al. (U.S. patent No. 6,837,432).

Re claim 1, Ogasawara discloses a wireless videophone with an integral digital camera (See Col. 3 Line 13-14) enabling a shopper to scan, recognize, and decode captured bar or icon code image of purchased items (See Fig. 13), and pattern recognition software in a videophone or in a server translates the barcode image data into an alpha-numeric product identification (See

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Col. 3 Line 11-20). A commercial telephone network facilitates connection of the store server to a wireless telephone via a cellular telephone network (See Fig. 1), and transmits the video graphic image of the numeric, alphanumeric or barcode identifier to a server for recognition processing (See Col. 22 Line 40-58). Processing results are then transmitted back to the customer's wireless videophone for display to the customer (See C6 Line 42-52).

However, Ogasawara fails to teach enhancing said barcode image utilizing said server.

Tsikos et al. disclose Internet-based remote monitoring, configuration, and service (RMCS) system as a server for use in reading barcode symbols and other character strings (See Col. 6 Line 52-55). The server corrects viewing angle distortion occurring in images of object surfaces captured as object surfaces at a non-zero skewed angle (See Fig. 18D), measures the pitch and yaw angles (See Col. 49 Line 25-31) of each slave Package Identification (PID) unit in the system, reduces the size image of the light emitting source (See Fig. 65B; Fig. 66B), rotates the x axis (See Fig. 1G17C-F), employs the camera pixel data buffer structure (See Fig. 20), and buffers edge detection processing module (See Fig. 19).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the RMCS system as a server for correcting a non-zero skewed angle, measuring a pitch and yaw angles, reducing the size image, rotating the x axis, employing the camera pixel data buffer structure, and buffering edge detection processing module as taught by Tsikos et al. into the teachings of Ogasawara in order to provide the RMCS server system through a network to barcode symbol reading/scanning system that it would identify and detect the barcode image for producing digital images.

Re claim 2, the teachings of Ogasawara have been discussed above.

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However, Ogasawara fails to teach that said enhancing of said barcode image by said server comprises at least one of the steps of: correcting said barcode image for skew; correcting said barcode image for yaw; correcting said barcode image for barcode sizing; correcting said barcode image for rotation of said barcode from the normal position; sharpening the pixels in said barcode image; and enhancing the edges of said barcode in said barcode image.

Tsikos et al. disclose Internet-based remote monitoring, configuration, and service (RMCS) system as a server for use in reading barcode symbols and other character strings (See Col. 6 Line 52-55). The server corrects viewing angle distortion occurring in images of object surfaces captured as object surfaces at a non-zero skewed angle (See Fig. 18D), measures the pitch and yaw angles (See Col. 49 Line 25-31) of each slave Package Identification (PID) unit in the system, reduces the size image of the light emitting source (See Fig. 65B; Fig. 66B), rotates the x axis (See Fig. 1G17C-F), employs the camera pixel data buffer structure (See Fig. 20), and buffers edge detection processing module (See Fig. 19).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the RMCS system as a server for correcting a non-zero skewed angle, measuring a pitch and yaw angles, reducing the size image, rotating the x axis, employing the camera pixel data buffer structure, and buffering edge detection processing module as taught by Tsikos et al. into the teachings of Ogasawara in order to provide the RMCS server system through a network to barcode symbol reading/scanning system that it would identify and detect the barcode image for producing digital images.

Re claim 7, Ogasawara in view of Tsikos et al. discloses a method of decoding and analyzing a barcode as recited in the rejected claim 1 stated above, wherein said mobile device is

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at least one of the group consisting of a camera phone, mobile phone, smart phone, PDA, pager, pocket PC or laptop computer (See Fig. 1; Fig. 10 in Ogasawara).

Re claim 9, Ogasawara in view of Tsikos et al. discloses a method of decoding and analyzing a barcode as recited in the rejected claim 1 stated above, wherein said media content is a search result of a database constructed from said barcode information (See Col. 22 Line 40-68 in Ogasawara).

Re claim 10, Ogasawara in view of Tsikos et al. discloses a method of decoding and analyzing a barcode as recited in the rejected claim 1 stated above, wherein said media content transmitted to said mobile device is product information (See Col. 22 Line 45-51 in Ogasawara).

Re claim 14, the teachings of Ogasawara have been discussed above.

However, Ogasawara fails to teach that said server enhances said barcode image by performing the steps of: correcting said barcode image for skew; correcting said barcode image for yaw; correcting said barcode image for barcode sizing; correcting said barcode image for rotation of said barcode from the normal position; sharpening the pixels in said barcode image; and enhancing the edges of said barcode in said barcode image.

Tsikos et al. disclose Internet-based remote monitoring, configuration, and service (RMCS) system as a server for use in reading barcode symbols and other character strings (See Col. 6 Line 52-55). The server corrects viewing angle distortion occurring in images of object surfaces captured as object surfaces at a non-zero skewed angle (See Fig. 18D), measures the pitch and yaw angles (See Col. 49 Line 25-31) of each slave Package Identification (PID) unit in the system, reduces the size image of the light emitting source (See Fig. 65B; Fig. 66B),

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rotates the x axis (See Fig. 1G17C -F), employs the camera pixel data buffer structure (See Fig. 20), and buffers edge detection processing module (See Fig. 19).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the RMCS system as a server for correcting a non-zero skewed angle, measuring a pitch and yaw angles, reducing the size image, rotating the x axis, employing the camera pixel data buffer structure, and buffering edge detection processing module as taught by Tsikos et al. into the teachings of Ogasawara in order to provide the RMCS server system through a network to barcode symbol reading/scanning system that it would identify and detect the barcode image for producing digital images.

5. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogasawara (U.S. patent No. 6,512,919, cited by the applicant) in view of Tsikos et al. (U.S. patent No. 6,837,432) as applied to claim 1 above, and further in view of Chiu (Pub. No. US 2002/0084330, cited by the applicant).

Re claim 3, the teachings of Ogasawara in view of Tsikos et al. have been discussed above.

However, Ogasawara in view of Tsikos et al. fails to teach that said decoding of said barcode comprises the steps of: calculating the number of edges in said barcode image; loading a first symbology library; comparing said number of edges to a predetermined threshold require for said symbology library; and decoding said barcode from said barcode image utilizing said symbology library.

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Chiu discloses the decoding steps of a barcode by recording a two-dimensional digital image, obtaining edge points from the image (See Col. 2 [0014]), recognizing the symbology of the barcode (See Col. 3 [0046]), counting and comparing the edge points to a predefined threshold value (See Col. 2 [0038]), and decoding the data characters in the barcode (See Col. 3 [0046]).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the decoding steps of a barcode as taught by Chiu into the teachings of Ogasawara in view of Tsikos et al. in order to provide a decoding method to barcode reading process by recording the image, obtaining edge points, recognizing symbology, counting and comparing the edge points to a threshold value, and decoding the data characters for detecting and recognizing barcode images.

Re claim 5, the teachings of Ogasawara in view of Tsikos et al. have been discussed above.

However, Ogasawara in view of Tsikos et al. fails to teach that said step of decoding said barcode from said barcode image utilizing said symbology library comprises the steps of: locating the start of said barcode in said barcode image; calculating the width of character blocks within said barcode image; calculating the relative widths of each bar and space within said character blocks; and decoding each character from said character blocks utilizing said symbology library.

Chiu discloses image processing and barcode decoding sub-system (See Fig. 1) in steps of starting from a digitized image from the camera, selecting edge points in the image (See Col. 3 [0047]), computing the widths of the alternating bar and space elements (See Col. 6 [0079]) in

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sub-pixel accuracy to read high density bar codes (See Col. 2 [0019]), and decoding the data characters in the bar code (See Col. 3 [0046]).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ image processing and barcode decoding sub-system with several steps as taught by Chiu into the teachings of Ogasawara in view of Tsikos et al. in order to provide the image processing and barcode decoding system to either server or mobile device that it would detect and recognize the barcode image for correct image capturing.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogasawara (U.S. patent No. 6,512,919) in view of Tsikos et al. (U.S. patent No. 6,837,432) and Chiu (Pub. No. US 2002/0084330) as applied to claim 3 above, and further in view of Brandt et al. (U.S. patent No. 6,585,157).

Re claim 4, the teachings of Ogasawara in view of Tsikos et al. and Chiu have been discussed above.

However, Ogasawara in view of Tsikos et al. and Chiu fails to teach that a plurality of other symbology libraries are loaded if said number of edges is less than said predetermined threshold.

Brandt et al. disclose that if the edge strength of the elements in the potential quiet zone were below some threshold, then other factors could be considered to determine if this was a valid quiet zone, which is required for decoding a particular symbology (See Col. 31 Line 29-42).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the method of comparing edge strength of the elements and threshold to determine validation of quiet zone for decoding a particular symbology as taught by Brandt et al. into the teachings of Ogasawara in view of Tsikos et al. and Chiu in order to test whether edge strength of the elements is below some threshold that it would determine valid quiet zone for decoding a symbology.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogasawara (U.S. patent No. 6,512,919, cited by the applicant) in view of Tsikos et al. (U.S. patent No. 6,837,432) and Chiu (Pub. No. US 2002/0084330, cited by the applicant) as applied to claim 5 above, and further in view of Antognini et al. (U.S. patent No. 6,820,807).

Re claim 6, the teachings of Ogasawara in view of Tsikos et al. and Chiu have been discussed above.

However, Ogasawara in view of Tsikos et al. and Chiu fails to teach that said step of decoding said barcode from said barcode image utilizing said symbology library comprises the steps of: verifying that said decoded barcode information is valid utilizing a checksum calculation.

Antognini et al. disclose a metasector having a checksum to correct decoded barcode information in the main body of data (See Col. 30 Line 46-62).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the checksum correctness for assuring decoded barcode information as taught by Antognini et al. into the teachings of Ogasawara in view of Tsikos et al.

and Chiu in order to provide checksum to the main body of decoded barcode information that it would correctly be interpreted for error detection.

8. Claim 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogasawara (U.S. patent No. 6,512,919, cited by the applicant) in view of Tsikos et al. (U.S. patent No. 6,837,432) as applied to claim 1 above, and further in view of Brandt et al. (U.S. patent No. 6,585,157).

Re claim 8, the teachings of Ogasawara in view of Tsikos et al. have been discussed above.

However, Ogasawara in view of Tsikos et al. fails to teach that said barcode is constructed from at least one of the standardized barcode symbology libraries consisting of the group of UPC-A, UC-E, ISBN, RSS-14, RSS-14E, RSS-14L, Interleaved 2 of 5, EAN/JAN-8, EAN/JAN-13, Code 3, Code 39 Full ASCII, Code 128, PDF417, QR Code, or Data Matrix.

Brandt et al. disclose an exemplary barcode graphical representation for an Interleaved 2 of 5 label (See Fig. 1A) and UPCA label (See Fig. 1B), and state a variety of other label formats including Code 39, Code 128, Code 49, and PDF 417 (See Col. 2 L52-61).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the variety of graphical label formats including Interleaved 2 of 5, UPCA, Code 39, Code49, Code 128, and PDF 417 as taught by Brandt et al. into the teachings of Ogasawara in view of Tsikos et al. in order to provide one of the appropriate decoding methods to barcode graphic formats that it could determine character information for high rate of successful decoding.

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9. Claims 11 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogasawara (U.S. patent No. 6,512,919, cited by the applicant) in view of Tsikos et al. (U.S. patent No. 6,837,432) as applied to claim 1 above, and further in view of Hansson (Pub. No. US2001/0041581).

Re claim 11, the teachings of Ogasawara in view of Tsikos et al. have been discussed above.

However, Ogasawara in view of Tsikos et al. fails to teach that said wireless network is a WAP network.

Hansson discloses a WAP application with a remote Internet server to transmit authentication code from a barcode label (See Col. 3 [0035]).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the WAP application with a remote Internet server to submit an authenticating barcode information as taught by Hansson into the teachings of Ogasawara in view of Tsikos et al. in order to apply WAP application that it transmit digital information on the Internet base wireless mobile phone for digital image processing.

Re claim 25, the teachings of Ogasawara in view of Tsikos et al. have been discussed above.

However, Ogasawara in view of Tsikos et al. fails to teach that said media content is transmitted to said mobile device via a SMS message.

Hansson discloses SMS message in GSM to transmit a digital message to a remote receiver (See Col. 3 [0035]).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the SMS message to transmit a digital message as taught by Hansson into the teachings of Ogasawara in view of Tsikos et al. in order to send short digital messages which is one of the media content to mobile phones for better transferring with mobile phone.

10. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogasawara (U.S. patent No. 6,512,919, cited by the applicant) in view of Tsikos et al. (U.S. patent No. 6,837,432) as applied to claim 1 above, and further in view of Rodrigo (Pub. No. US2003/0074286).

Re claim 12, the teachings of Ogasawara in view of Tsikos et al. have been discussed above.

However, Ogasawara in view of Tsikos et al. fails to teach that said barcode image is transmitted to said server via a MMS message.

Rodrigo discloses MMSC (Multimedia Message Service Center) that produces charging events to transmit a digital image as a network element (See Col. 3 [0034]).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ MMSC to transmit a digital image in a network as taught by Rodrigo into the teachings of Ogasawara in view of Tsikos et al. in order to provide MMSC to send and receive wireless messages that include barcode image between mobile phones and other devices for rich mobile communication.

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11. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogasawara (U.S. patent No. 6,512,919, cited by the applicant) in view of Chiu (Pub. No. US 2002/0084330, cited by the applicant).

Re claim 15, the teachings of Ogasawara have been discussed above.

However, Ogasawara fails to teach that said decoding of said barcode comprises the steps of: calculating the number of edges in said barcode image; loading a first symbology library; comparing said number of edges to a predetermined threshold require for said symbology library; and decoding said barcode from said barcode image utilizing said symbology library.

Chiu discloses the decoding steps of a barcode by recording a two-dimensional digital image, obtaining edge points from the image (See Col. 2 [0014]), recognizing the symbology of the barcode (See Col. 3 [0046]), counting and comparing the edge points to a predefined threshold value (See Col. 2 [0038]), and decoding the data characters in the barcode (See Col. 3 [0046]).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the decoding steps of a barcode as taught by Chiu into the teachings of Ogasawara in order to provide a decoding method to barcode reading process by recording the image, obtaining edge points, recognizing symbology, counting and comparing the edge points to a threshold value, and decoding the data characters for detecting and recognizing barcode images.

Re claim 16, the teachings of Ogasawara have been discussed above.

However, Ogasawara fails to teach that said step of decoding said barcode from said barcode image utilizing said symbology library comprises the steps of: locating the start of said

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barcode in said barcode image; calculating the width of character blocks within said barcode image; calculating the relative widths of each bar and space within said character blocks; and decoding each character from said character blocks utilizing said symbology library.

Chiu discloses image processing and barcode decoding sub-system (See Fig. 1) in steps of starting from a digitized image from the camera, selecting edge points in the image (See Col. 3 [0047]), computing the widths of the alternating bar and space elements (See Col. 6 [0079]) in sub-pixel accuracy to read high density bar codes (See Col. 2 [0019]), and decoding the data characters in the bar code (See Col. 3 [0046]).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ image processing and barcode decoding sub-system with several steps as taught by Chiu into the teachings of Ogasawara in order to provide the image processing and barcode decoding system to either server or mobile device that it would detect and recognize the barcode image for correct image capturing.

12. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogasawara (U.S. patent No. 6,512,919) in view of Chiu (Pub. No. US 2002/0084330) as applied to claim 15 above, and further in view of Brandt et al. (U.S. patent No. 6,585,157).

Re claim 17, the teachings of Ogasawara in view of Chiu have been discussed above.

However, Ogasawara in view of Chiu fails to teach that a plurality of other symbology libraries are loaded if said number of edges is less than said predetermined threshold.

Brandt et al. disclose that if the edge strength of the elements in the potential quiet zone were below some threshold, then other factors could be considered to determine if this was a

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valid quiet zone, which is required for decoding a particular symbology (See Col. 31 Line 29-42).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the method of comparing edge strength of the elements and threshold to determine validation of quiet zone for decoding a particular symbology as taught by Brandt et al. into the teachings of Ogasawara in view of Chiu in order to test whether edge strength of the elements is below some threshold that it would determine valid quiet zone for decoding a symbology.

13. Claim 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogasawara (U.S. patent No. 6,512,919, cited by the applicant) in view of Brandt et al. (U.S. patent No. 6,585,157).

Re claim 19, the teachings of Ogasawara have been discussed above.

However, Ogasawara fails to teach that said barcode is constructed from at least one of the standardized barcode symbology libraries consisting of the group of UPC-A, UC-E, ISBN, RSS-14, RSS-14E, RSS-14L, Interleaved 2 of 5, EAN/JAN-8, EAN/JAN-13, Code 3, Code 39 Full ASCII, Code 128, PDF417, QR Code, or Data Matrix.

Brandt et al. disclose an exemplary barcode graphical representation for an Interleaved 2 of 5 label (See Fig. 1A) and UPCA label (See Fig. 1B), and state a variety of other label formats including Code 39, Code 128, Code 49, and PDF 417 (See Col. 2 L52-61).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the variety of graphical label formats including Interleaved 2

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of 5, UPCA, Code 39, Code49, Code 128, and PDF 417 as taught by Brandt et al. into the teachings of Ogasawara in order to provide one of the appropriate decoding methods to barcode graphic formats that it could determine character information for high rate of successful decoding.

14. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogasawara (U.S. patent No. 6,512,919, cited by the applicant) in view of Hansson (Pub. No. US2001/0041581).

Re claim 22, the teachings of Ogasawara have been discussed above.

However, Ogasawara fails to teach that said wireless network is a WAP network.

Hansson discloses a WAP application with a remote Internet server to transmit authentication code from a barcode label (See Col. 3 [0035]).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the WAP application with a remote Internet server to submit an authenticating barcode information as taught by Hansson into the teachings of Ogasawara in order to apply WAP application that it transmit digital information on the Internet base wireless mobile phone for digital image processing.

15. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogasawara (U.S. patent No. 6,512,919, cited by the applicant) in view of Rodrigo (Pub. No. US2003/0074286).

Re claim 23, the teachings of Ogasawara have been discussed above.

However, Ogasawara fails to teach that said barcode image is transmitted to said server via a MMS message.

Rodrigo discloses MMSC (Multimedia Message Service Center) that produces charging events to transmit a digital image as a network element (See Col. 3 [0034]).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ MMSC to transmit a digital image in a network as taught by Rodrigo into the teachings of Ogasawara in order to provide MMSC to send and receive wireless messages that include barcode image between mobile phones and other devices for rich mobile communication.

16. Claim 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogasawara (U.S. patent No. 6,512,919, cited by the applicant) in view of Tsikos et al. (U.S. patent No. 6,837,432) as applied to claim 1 above, and further in view of Klein Twennaar (Pub. No. US2003/0055675).

Re claim 24, the teachings of Ogasawara in view of Tsikos et al. have been discussed above.

However, Ogasawara in view of Tsikos et al. fails to teach that said media content is transmitted to said mobile device via a MMS message.

Klein Twennaar discloses MMS to transmit barcode information to a transaction operator processor (See Col. 7 [0137]-[0139]).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ MMS to transmit a barcode information as taught by Klein Twennaar into the teachings of Ogasawara in view of Tsikos et al. in order to allow users to

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exchange multimedia content between mobile phones and other devices for rich mobile communication.

Double Patenting

17. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

18. Claims 1-4, 7-15, and 17-23 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, 4-11, and 14-23 of copending Application No. 10/757,095 of Attia et al. Although the conflicting claims are not identical, they are not patentably distinct from each other because the method and the system of decoding and analyzing a barcode are same in general process of wireless network communication between a server and a portable unit.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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19. Claim 24 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 13 and 24 of copending Application No. 10/757,095 of Attia et al. in view of Klein Twennaar (Pub. No. US2003/0055675).

Re claim 24, Attia et al. discloses that barcode information is transmitted to server via a MMS message.

However, Attia et al. fail to teach that said media content is transmitted to said mobile device via a MMS message.

Klein Twennaar discloses MMS to transmit barcode information to a transaction operator processor (See Col. 7 [0137]-[0139]).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ MMS to transmit a barcode information as taught by Klein Twennaar into the teachings of Ogasawara in order to allow users to exchange multimedia content between mobile phones and other devices for rich mobile communication.

This is a provisional obviousness-type double patenting rejection.

20. Claim 25 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 12 of copending Application No. 10/757,095 of Attia et al. in view of Hansson (Pub. No. US2001/0041581).

Re claim 25, Attia et al. discloses barcode information is transmitted to said server via a SMS message.

However, Attia et al. fails to teach that said media content is transmitted to said mobile device via a SMS message.

Hansson discloses SMS message in GSM to transmit a digital message to a remote receiver (See Col. 3 [0035]).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the SMS message to transmit a digital message as taught by Hansson into the teachings of Ogasawara in order to send short digital messages which is one of the media content to mobile phones for better transferring with mobile phone.

This is a provisional obviousness-type double patenting rejection.

Conclusion

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ma et al. (U.S. patent No. 6,674,919) disclose a method of calculating a skew angle for a two-dimensional barcode in which the horizontal or vertical edges within the barcode are located; Webb et al. (Pub. No. US 2002/0071076) disclose a system and method for implementing a wireless data transmission scheme through the use of a display capable of displaying symbolic information.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Park whose telephone number is 571-272-2350. The examiner can normally be reached on 5:30am - 2:00pm (Monday - Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 571-272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John J Park
Examiner
Art Unit 2876



STEVEN S. PAIK
PRIMARY EXAMINER